

AMENDMENTS TO THE CLAIMS

Claims 1-37 (Cancelled)

38. (Currently Amended) A femur fixture for a hip-joint prosthesis, comprising:

an intraosseous anchoring structure of a generally circular cross-section for screwing laterally into a complementary bore drilled laterally into the neck of a femur after resection of the femur head to an anchored position, the intraosseous anchoring structure being formed from a single, one-piece member and having a proximal end, a distal end, a relatively short frusto-conical proximal section at the proximal end, and a proximal cylindrical section having a screw thread profile thereon and extending towards the distal end from the frusto-conical proximal section, the screw thread profile extending from said frusto-conical proximal section towards the distal end, said frusto-conical proximal section being shorter than said proximal cylindrical section, the frusto-conical proximal section and the proximal cylindrical section each being dimensioned so as to bear against the cortex of the femur neck when the intraosseous anchoring structure is in the anchored position; and

a collar section having a distal surface abutting and extending outwardly from the frusto-conical portion, said collar section extending generally radially outwardly from the intraosseous anchoring structure.

39. (Previously Presented) The femur fixture as claimed in claim 38, wherein the intraosseous anchoring structure is so dimensioned that its distal end projects through the lateral cortex of the femur when the intraosseous anchoring structure is in the anchored position.

40. (Previously Presented) The femur fixture as claimed in claim 38, wherein the intraosseous anchoring structure further has a distal cylindrical section having a screw thread profile thereon and extending towards the proximal cylindrical section from the distal end of the intraosseous anchoring structure, the diameter of said distal cylindrical section being less than the diameter of said proximal cylindrical section.

41. (Previously Presented) The femur fixture as claimed in claim 40, wherein the screw thread profiles of said proximal and distal cylindrical sections are essentially the same.

42. (Previously Presented) The femur fixture as claimed in claim 40, wherein said intraosseous anchoring structure further comprises a tapered connecting section provided between and interconnecting said proximal and distal cylindrical sections.

43. (Previously Presented) The femur fixture as claimed in claim 42, wherein said connecting section has a frusto-conical shape which at one end has a proximal diameter essentially equal to the diameter of said proximal cylindrical section, and at the other end has a distal diameter essentially equal to the diameter of said distal cylindrical section.

44. (Previously Presented) The femur fixture as claimed in claim 42, wherein said connecting section has a flank angle in the range of 15°-45°.

45. (Previously Presented) The femur fixture as claimed in claim 42, wherein said connecting section is at least partly provided with a blasted surface.

46. (Previously Presented) The femur fixture as claimed in claim 42, wherein said connecting section is at least partly provided with a circumferentially oriented roughness.

47. (Previously Presented) The femur fixture as claimed in claim 46, wherein said circumferentially oriented roughness has a height less than that of the screw thread profiles of said proximal and distal cylindrical sections.

48. (Previously Presented) The femur fixture as claimed in claim 46, wherein a height of said circumferentially oriented roughness is no greater than 0.3 mm.

49. (Previously Presented) The femur fixture as claimed in claim 42, wherein said connecting section is at least partly provided with a smooth surface.

50. (Previously Presented) The femur fixture as claimed in claim 42, wherein the entire surface of said connecting section is smooth.

51. (Previously Presented) The femur fixture as claimed in claim 42, wherein one or more self-tapping cutting recesses are provided at least in part on said connecting section.

52. (Previously Presented) The femur fixture as claimed in claim 38, wherein said frusto-conical proximal section at an end thereof interfacing said proximal cylindrical section presents a diameter essentially equal to the diameter of said proximal cylindrical section.

53. (Previously Presented) The femur fixture as claimed in claim 38, wherein said frusto-conical proximal section has a flank angle in the range of 8-15°.

54. (Previously Presented) The femur fixture as claimed in claim 38, wherein the frusto-conical proximal section has an axial extent in the range of 5-10 mm.

55. (Previously Presented) The femur fixture as claimed in claim 38, wherein the frusto-conical proximal section has a proximal diameter in the range of 18-30 mm.

56. (Previously Presented) The femur fixture as claimed in claim 38, wherein the frusto-conical proximal section is at least partly provided with a roughened surface.

57. (Previously Presented) The femur fixture as claimed in claim 56, wherein said roughened surface is at least partly a blasted surface.

58. (Previously Presented) The femur fixture as claimed in claim 56, wherein said roughened surface is at least partly provided with a circumferentially oriented roughness.

59. (Previously Presented) The femur fixture as claimed in claim 58, wherein said circumferentially oriented roughness is in the shape of a screw thread profile.

60. (Previously Presented) The femur fixture as claimed in claim 59, wherein the screw thread profile of said frusto-conical proximal section differs from the screw thread profile of said proximal cylindrical section.

61. (Previously Presented) The femur fixture as claimed in claim 60, wherein the screw thread profile of said frusto-conical proximal section has a height less than the screw thread profile of said proximal cylindrical section.

62. (Previously Presented) The femur fixture as claimed in claim 59, wherein the height of the screw thread profile on the frusto-conical proximal section is no greater than 0.3 mm.

63. (Previously Presented) The femur fixture as claimed in claim 59, wherein the screw thread profile on the frusto-conical proximal section is formed by the turns of one or more screw threads.

64. (Previously Presented) The femur fixture as claimed in claim 58, wherein said circumferentially oriented roughness is in the form of circumferential beads.

65. (Previously Presented) The femur fixture as claimed in claim 64, wherein said circumferential beads has a height less than that of the screw thread profile of said proximal cylindrical section.

66. (Previously Presented) The femur fixture as claimed in claim 64, wherein the height of said circumferential beads is no greater than 0.3 mm.

67. (Currently Amended) The femur fixture as claimed in claim 38, further comprising a head section for supporting a ball component of the hip-joint prosthesis, said head section comprising [[a]] said collar section ~~having a distal surface abutting said intraosseous anchoring structure.~~



68. (Previously Presented) The femur fixture as claimed in claim 67, wherein said distal surface is inclined inwardly towards the body of the collar section.

69. (Previously Presented) The femur fixture as claimed in claim 68, wherein said distal surface is inclined inwardly at an inclination angle within the range of 10°-20°.

70. (Previously Presented) The femur fixture as claimed in claim 67, wherein said distal surface is concave.

71. (Previously Presented) The femur fixture as claimed in claim 67, wherein said distal surface is provided with radially spaced circular beads.

72. (Previously Presented) The femur fixture as claimed in claim 71, wherein said circular beads have a height in the range of 0.1-0.5 mm.

73. (Previously Presented) A set of femur fixtures according to claim 38, wherein the frusto-conical proximal section and the

proximal cylindrical section of each fixture in the set have different dimensions, whereby the fixture in the set having the frusto-conical proximal section and the proximal cylindrical section of correct size for abutting the cortex of the femur neck of a particular patient can be selected for use in that patient.

74. (Previously Presented) A set of femur fixtures according to claim 40, wherein the distal cylindrical sections of all fixtures in the set have the same dimension, and the frusto-conical proximal section and the proximal cylindrical section of each fixture in the set have different dimensions, whereby the fixture in the set having the frusto-conical proximal section and the proximal cylindrical section of correct size for abutting the cortex of the femur neck of a particular patient can be selected for use in that patient.

75. (New) The femur fixture as claimed in claim 38, further comprising a tapered mounting section, said tapered mounting section extending from a proximal end of said collar section to a proximal end of the femur fixture.

76. (New) A femur fixture for a hip-joint prosthesis, comprising:

an intraosseous anchoring structure of a generally circular cross-section for screwing laterally into a complementary bore drilled laterally into the neck of a femur after resection of the femur head to an anchored position, the intraosseous anchoring structure having a proximal end, a distal end, a frusto-conical proximal section at the proximal end, and a proximal cylindrical section having a screw thread profile thereon, said frusto-conical proximal section being shorter than said proximal cylindrical section, the frusto-conical proximal section and the proximal cylindrical section each being dimensioned so as to bear against the cortex of the femur neck when the intraosseous anchoring structure is in the anchored position;

a collar section having a distal surface abutting and extending outwardly from the frusto-conical portion; and

a tapered mounting section, said tapered mounting section extending from a proximal end of said collar section to a proximal end of the femur fixture.

77. (New) The femur fixture as claimed in claim 76, wherein the frusto-conical proximal section and the proximal cylindrical section are formed from a single, one-piece member.

78. (New) The femur fixture as claimed in claim 77, wherein the screw thread profile extends from said frusto-conical portion towards the distal end from the frusto-conical proximal section.